

From: [Johnson, Elois](#)
To: [Suplee, Mike](#); [Greeley, Carrie](#)
Subject: FW: Comments on Nutrient Standards and Variances DEQ-12A and DEQ-12B
Date: Friday, April 04, 2014 8:29:50 AM
Attachments: [MVWQD Numeric Nutrient Criteria Comments.docx](#)

Mike:

As you can see below, Mr. Harvala emailed this comment to deqwpdadmin@mt.gov and me. I didn't forward this comment, assuming you or Carrie would have received it as it was addressed to deqwpdadmin. There were, if I remember correctly, a couple of other comments that were addressed to this same email address, and I didn't forward them either, assuming you already received them. So you received all the other comments that are on the list I sent you? Thanks.

Elois

From: Jon Harvala [<mailto:jharvala@co.missoula.mt.us>]
Sent: Tuesday, April 01, 2014 5:01 PM
To: deqwpdadmin@mt.gov; Johnson, Elois
Subject: Comments on Nutrient Standards and Variances DEQ-12A and DEQ-12B

Elois;
The Missoula Water Quality District submits the proposed comments.
Jon

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April 1, 2014

Elois Johnson, Paralegal
Department of Environmental Quality
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Helena, MT 59620-0901

Re: Comments on Proposed Numeric Nutrient Standards DEQ-12A and Variances DEQ-12B

To Whom it May Concern:

The Missoula Valley Water Quality District (MVWQD) submits the following comments on the proposed Montana Base Numeric Nutrient Standards (Montana Department of Environmental Quality (DEQ) Circular DEQ-12A) and associated Rule amendments. The comments are based on over 30 years of effort that led to the first nutrient TMDL in Montana and current numeric standards in effect on the Clark Fork River. The comments include a brief summary of Missoula's nutrient reduction efforts, support for the proposed nutrient standards and comments on proposed Rule 1 (Department Circular DEQ-12B) that implements 75-5-313, MCA.

Clark Fork River Impairment – VNRP, TMDL & Clark Fork River Standards

Nutrient pollution of the Clark Fork drainage and resultant nuisance algae growth has focused concern about water quality in the Clark Fork River for many years. In the 1980's a proposal to allow year round discharge from the Frenchtown kraft paper mill eventually resulted in a comprehensive water quality monitoring plan for the Clark Fork Basin. The 1989 Nutrient Pollution Source Assessment, completed by the Montana Department of Health and Environmental Sciences (predecessor to Montana Department of Environmental Quality (DEQ) identified major sources of nutrients and has provided the essential baseline water quality data that subsequent monitoring and nutrient reduction efforts used to measure progress.

In 1988 the City of Missoula and Missoula County jointly enacted the Missoula Phosphate Ordinance, which prohibited the sale of laundry detergent containing more than 0.5% phosphorus, became effective in 1989. This resulted in an almost immediate 40% reduction in phosphorus discharged to the Clark Fork River from the City of Missoula WWTP.

A Voluntary Nutrient Reduction Program (VNRP) for the upper Clark Fork River was negotiated among the Cities of Butte, Deer Lodge and Missoula along with Stone Container Corporation, Montana DEQ, Missoula County and the Tri-State Implementation Council in 1998 and approved by the United States EPA as a TMDL. The VNRP specified the options the

dischargers chose to implement to reduce critical summer discharges of the nutrients nitrogen and phosphorous.

Recommended nutrient limits were proposed and accepted by the major dischargers and Montana DEQ in the 1998 Voluntary Nutrient Reduction Plan (VNRP). The agreed upon load limits were also accepted by the United States Environmental Protection Agency (USEPA) in its Total Maximum Daily Load (TMDL) approval in 1998. The in-stream nutrient standards proposed in the VNRP have also been adopted as in-stream water quality standards in ARM 17.30.631(2)(a)(b).

The City of Missoula's updated Wastewater Facility Plan (April, 1999) reflects commitments to nutrient reduction negotiated in the VNRP. The City of Missoula committed to provide a level of treatment equivalent to a conventional biological nutrient removal (BNR) facility. Construction of these improvements to the City of Missoula wastewater treatment plant was completed and fully operational by 2004. The Missoula WWTP BNR treatment process is effectively removing nitrogen and phosphorus even as the population of the City of Missoula has increased and over 3,500 homes using septic systems connected to the WWTP. During the period of the VNRP Missoula's WWTP discharge peaked at just over 1,800 pounds per day of nitrogen in 2002 and over 200 pounds per day of phosphorus in 2003. The BNR upgrade reduced daily discharge to 675 pounds per day of nitrogen and 54 pounds per day of phosphorus. Optimization of WWTP operations has further reduced the discharge of nitrogen and phosphorus to 515 and 38 pounds per day respectively. The City is also moving toward land application of effluent on a poplar plantation to further reduce summer nutrient loads to the Clark Fork River. Following up on the success of the 1989 Phosphate Ordinance, the City of Missoula and Missoula County supported legislation in 2009 that resulted in limits on phosphorus in dishwashing detergent that went into effect in 2010.

The recently released Clark Fork River Nutrient Water Quality Status and Trends Report, 1998-2012 documents improvements in water quality resulting from these efforts. The monitoring station located below the City of Missoula WWTP discharge was the only monitoring site that demonstrated a significant or highly significant downward trend in total and soluble nitrogen and phosphorus as well chlorophyll-a. The history of Missoula and the Clark Fork River demonstrates that continuous effort has been necessary over the last 25 years to reduce nutrients enough to effect measurable reductions in nuisance algae.

Proposed Rule Amendments and Circular DEQ-12A

The Missoula Valley Water Quality District fully supports the proposed nutrient standards contained in proposed circular DEQ-12A. The numeric criteria proposed to be enacted as standards in DEQ-12A are scientifically sound. The approach uses reference stream data within ecoregions to develop numeric standards for total nitrogen and phosphorus within each ecoregion. This method accounts for regional differences in Montana's wadeable streams.

The proposed standards should prevent impairment of many Montana streams. It has taken decades of effort and millions of dollars of investment to reduce nutrient pollution in the Clark Fork River. Measurable standards can also help prioritize investment in improved wastewater

treatment or other nutrient source reduction within watersheds. Our experience in Missoula has demonstrated that measurable nutrient standards informed and motivated investment in improved wastewater treatment and also motivated efforts to look for other source controls (Phosphate ordinance and legislation). The City of Missoula also has achieved significant nutrient reduction and maintained affordable sewer rates while the population and economy has grown.

Proposed Rule Amendments and Circular DEQ-12B

The MVWQD recognizes that planning for necessary improvements in wastewater treatment will take time and financing these improvements may be a significant financial burden to many communities. Larger communities like Missoula have advantages in terms of economies of scale that smaller communities do not. The MVWQD suggests DEQ consider developing examples and regional case studies of available technologies and alternative wastewater practices for smaller communities as early as possible to inform evaluation of variances under DEQ-12B. Our experience in Missoula also recognizes that Montanans care about water quality and are willing to invest in it.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jon Harvala', is written over a faint, circular official stamp.

Jon Harvala